

IN THE CLAIMS

Please amend claims 1 - 3, 7, 9, 11, 13 - 15, 17, and 19 and add new claim 23 to read as follows:

1. (Amended) A semiconductor apparatus comprising:
a semiconductor device to be mounted on a circuit board;
a plurality of conductive posts electrically connected to the semiconductor device; and

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means for mounting the device onto a circuit board by soldering, including a plurality of conductive bumps respectively positioned on an outer end of each of the conductive posts for soldering onto the circuit board, wherein a peripheral edge of a resin covering for sealing a surface of the semiconductor device and an outer edge of the conductive post are separated by a distance narrower than a height of the conductive post.

2. (Amended) A semiconductor apparatus according to claim 1, wherein the distance is in a range between 50 and 100 micrometers.

3. (Amended) A semiconductor apparatus according to claim 1, wherein the semiconductor device is provided with a plurality of electrode pads connected to the conductive posts, the electrode pads being arranged on a line extending in a center portion of the semiconductor device.

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4. A semiconductor apparatus according to claim 1, wherein the semiconductor device is provided with a plurality of electrode pads connected to the conductive posts, each of the electrode pads being arranged between two adjacent conductive posts.

5. A semiconductor apparatus according to claim 1, wherein the semiconductor device is provided with a plurality of electrode pads connected to the conductive posts, each of the electrode pads being arranged directly under a corresponding conductive post.

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6. A semiconductor apparatus according to claim 1, wherein the conductive bumps are of solder.

7. (Amended) A semiconductor apparatus comprising:
a semiconductor device;
a plurality of conductive posts electrically connected to the semiconductor device;
means for mounting the device onto a circuit board by soldering, including a plurality of conductive bumps respectively positioned on an outer end of each of the conductive posts for soldering onto the circuit board; and

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a molding resin covering a surface of the semiconductor device, wherein the molding resin is shaped to have a step along the entirety of a peripheral edge of the semiconductor device, the step having upper and lower level portions.

8. A semiconductor apparatus according to claim 7, wherein the difference in level between the upper portion and lower portion of the step is half of a thickness of the mold resin.

9. (Amended) A semiconductor apparatus according to claim 7, wherein the difference in level between the upper portion and lower portion of the step is in a range between 40 and 60 micrometers.

10. A semiconductor apparatus according to claim 7, wherein the conductive bumps are of solder.

11. (Amended) A semiconductor apparatus comprising:
a semiconductor device;
a plurality of conductive posts electrically connected to the semiconductor device;
means for mounting the device onto a circuit board by soldering, including a plurality of first conductive bumps respectively positioned on an outer end of each of the conductive posts for soldering onto the circuit board;

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a molding resin covering a surface of the semiconductor device without covering a peripheral side surface of the conductive posts; and

an insulating layer formed on a peripheral surface of the semiconductor device between an upper surface of the semiconductor device and the conductive posts, wherein the molding resin is shaped to have a peripheral side surface on the identical plane with the peripheral side surface of the semiconductor device.

12. A semiconductor apparatus according to claim 11, wherein the insulating layer is formed to have a width of 100 to 200 μ m.

13. (Amended) A semiconductor apparatus according to claim 11, further comprising

a plurality of second conductive bumps each provided on a respective peripheral side surface of a respective one of the conductive posts.

14. (Amended) A semiconductor apparatus according to claim 11, wherein the first conductive bumps are of solder.

15. (Amended) A method for fabricating a semiconductor apparatus according to claim 7, comprising the steps of:

providing a semiconductor wafer on which a plurality of semiconductor devices are formed, each of the semiconductor device having electrode pads

thereon;

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providing a plurality of conductive post connected to the electrode pads of the semiconductor devices;

molding the semiconductor devices with a molding resin so that an upper surface of the molding resin is on the same plane with upper surfaces of the conductive posts;

removing a part of the molding resin to be located at a peripheral edge so that the peripheral edge of the molding resin has a step, the step having upper and lower level portions;

providing conductive bumps on outer ends of the conductive posts; and

dicing the semiconductor wafer to form a plurality of individual semiconductor apparatuses.

16. A method according to claim 15, wherein the difference in level between the upper portion and lower portion of the step is half of a thickness of the mold resin.

17. (Amended) A method according to claim 15, wherein the difference in level between the upper portion and lower portion of the step is in a range between 40 and 60 micrometers.

18. A method according to claim 15, wherein the conductive bumps are of solder.

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19. (Amended) A method for fabricating a semiconductor apparatus according to claim 11, comprising the steps of:

providing a semiconductor wafer on which a plurality of semiconductor devices are formed, each of the semiconductor devices having electrode pads thereon;

forming grooves in the semiconductor wafer at portions corresponding to dicing lines of the semiconductor wafer;

forming an insulating layer on the wafer so that the grooves are filled with the insulating layer but a part of each electrode pad of the semiconductor devices is not covered with the insulating layer;

forming a metal layer on the insulating layer and the part of each electrode pad, not covered with the insulating layer;

forming a rewiring layer on the metal layer;

providing a conductive post material extending across each of the grooves;

molding the semiconductor wafer with a molding resin so that an upper surface of the molding resin is on the same plane with upper surfaces of the conductive post material across each of the grooves;

providing a conductive bump material on the conductive post material; and

dicing the semiconductor wafer at the grooves to form a plurality of individual semiconductor apparatuses.

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